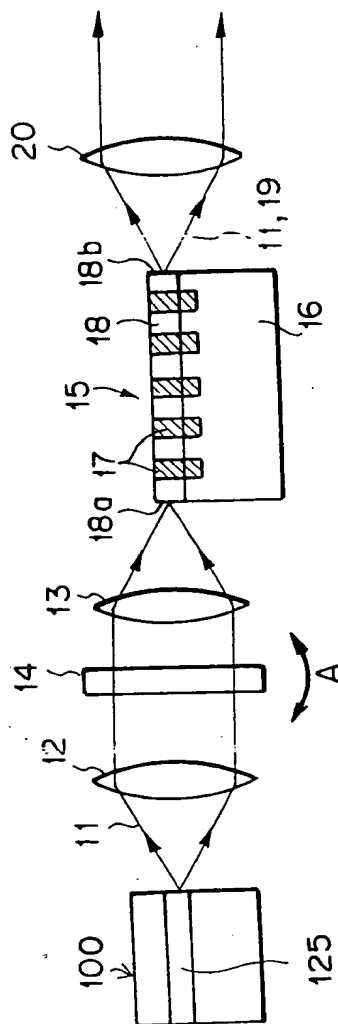


APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

YAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 1 of 38

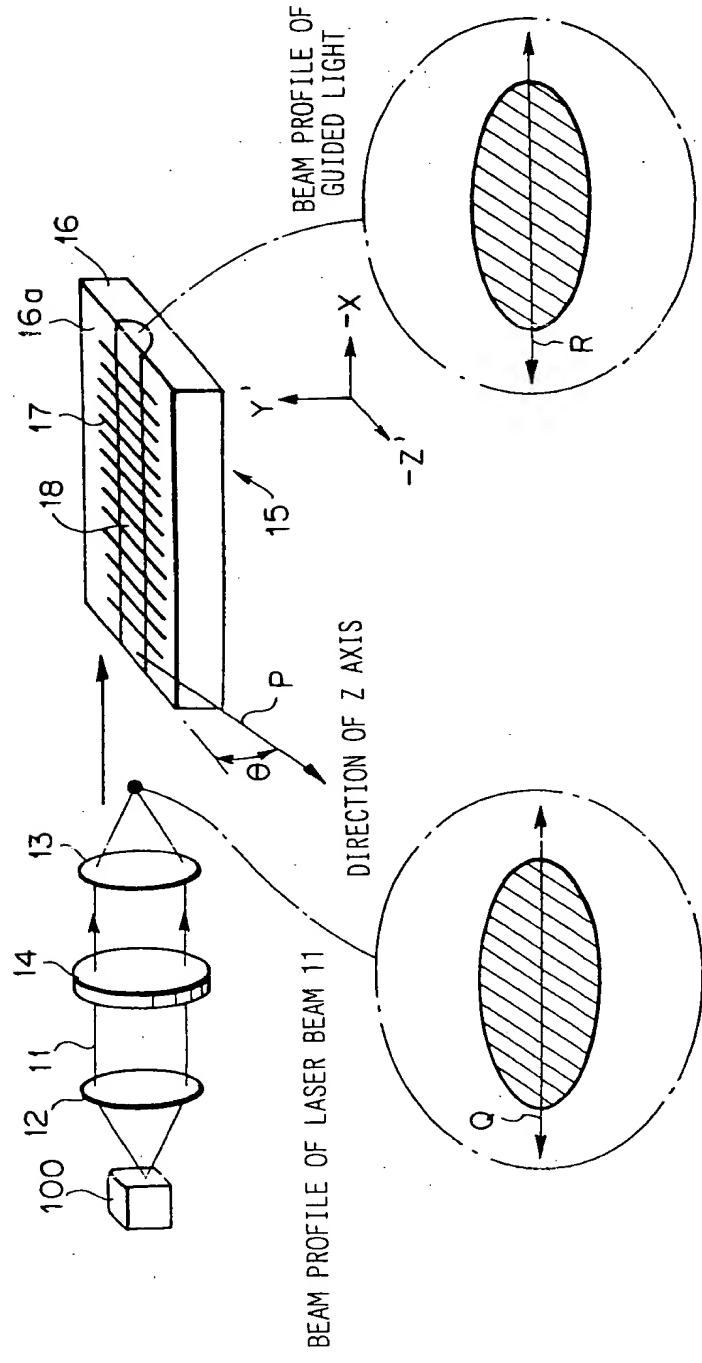
F I G . 1



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic. 202-293-7060  
 2 of 38

# FIG. 2

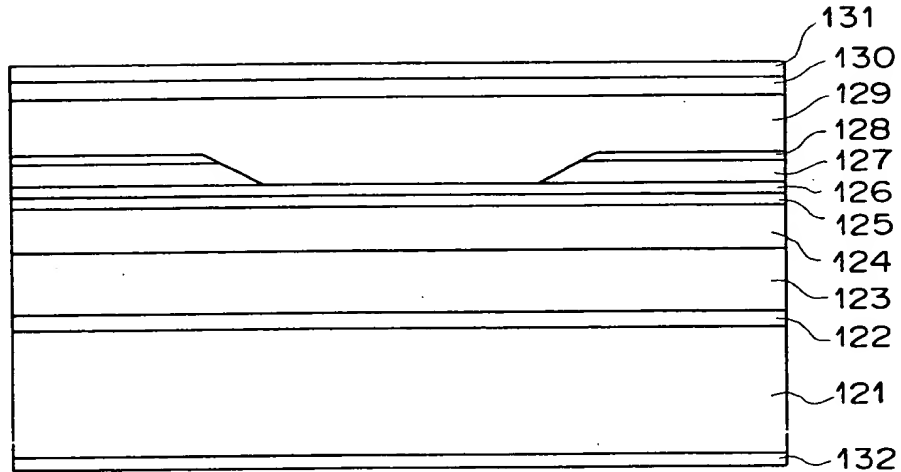


APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 3 of 38

F I G . 3

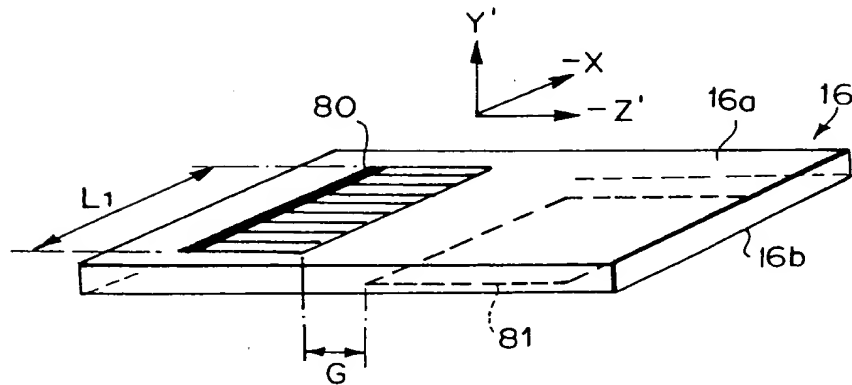
100



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

YAKAWA.....Q64226  
 MICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 4 of 38

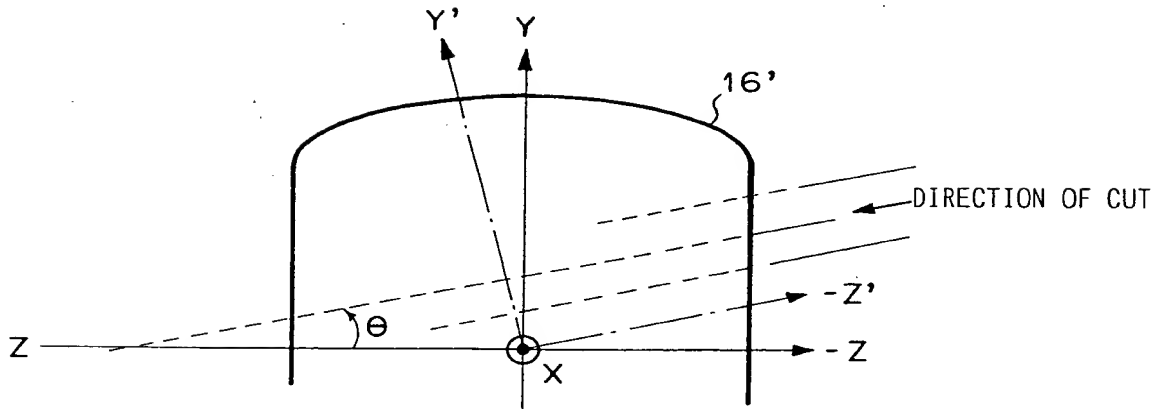
F I G . 4



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

YAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 5 of 38

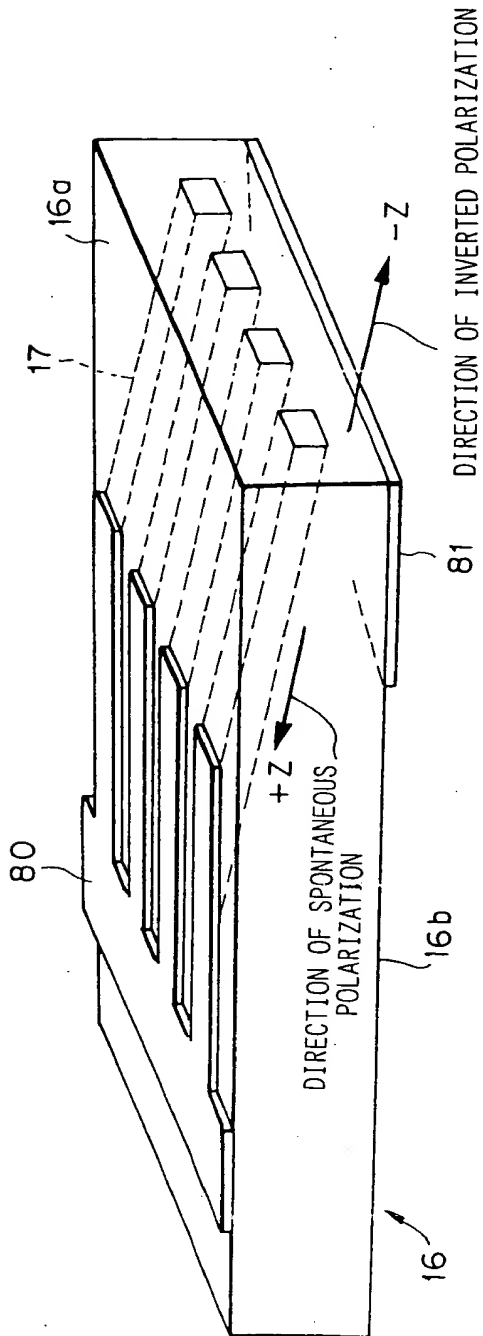
F I G . 5



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

Q64226  
HAYAKAWA  
SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLA  
HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
Filed: April 24, 2001  
Darryl Mexic  
6 of 38

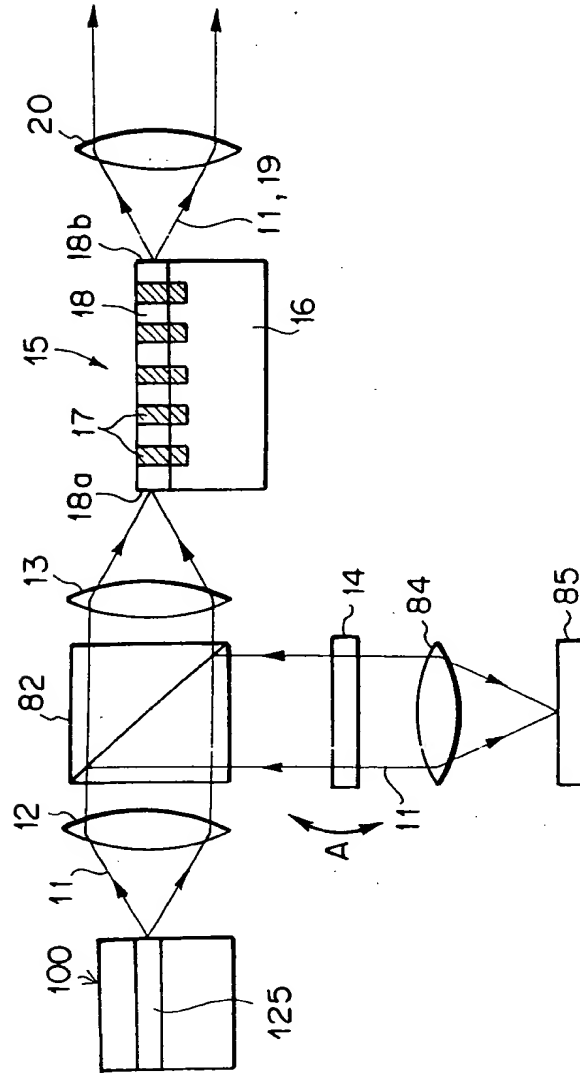
F I G . 6



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic 202-293-7060  
 7 of 38

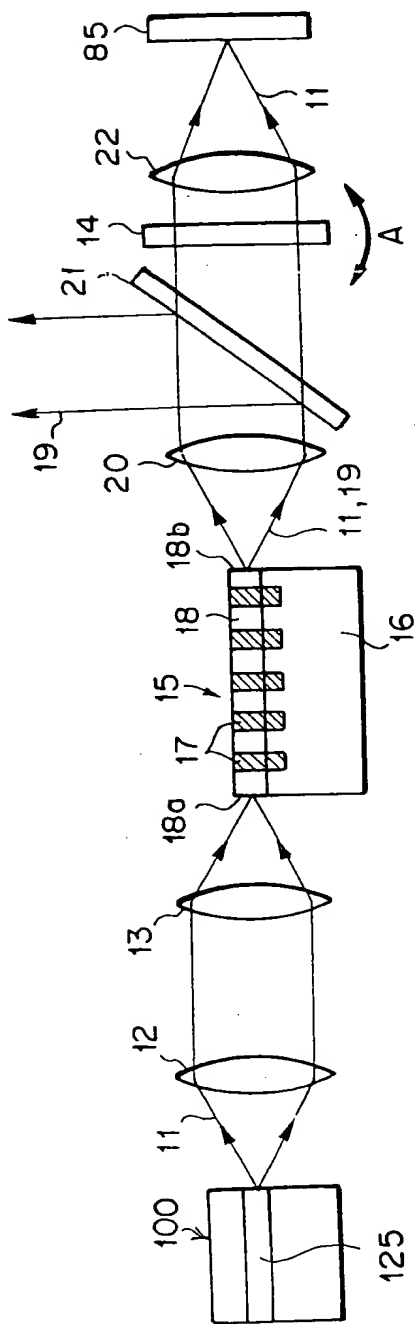
FIG. 7



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA, Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexico 202-293-7060  
 8 of 38

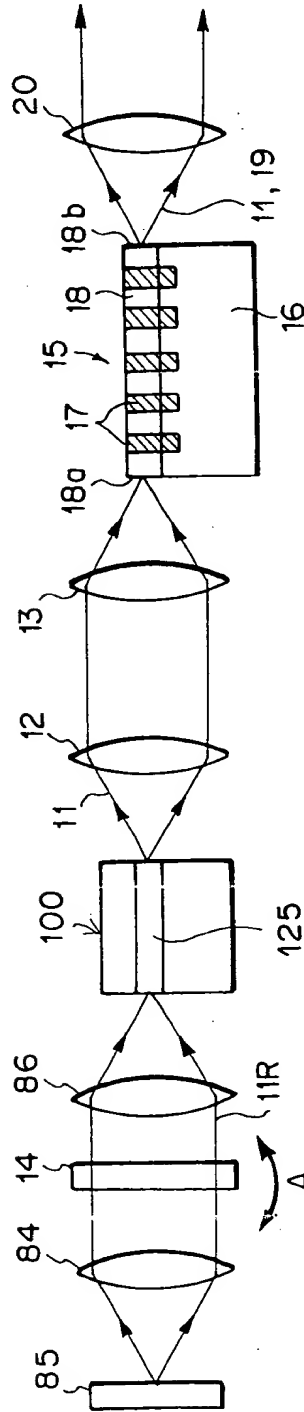
F I G . 8



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

HAYAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 9 of 38

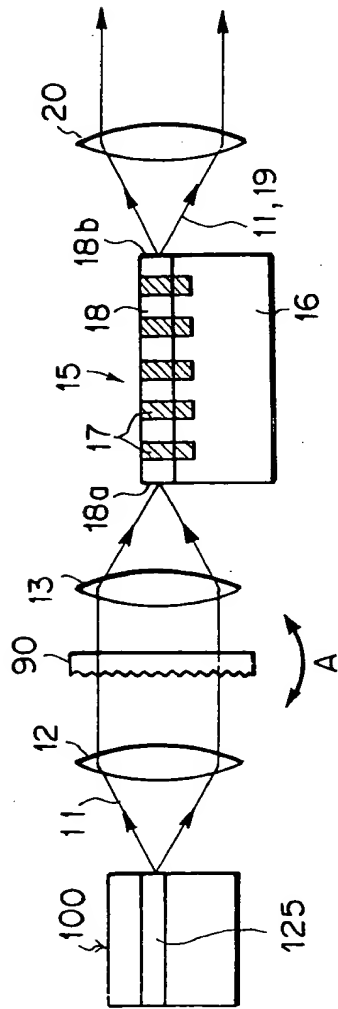
F I G . 9



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic 202-293-7060  
 10 of 38

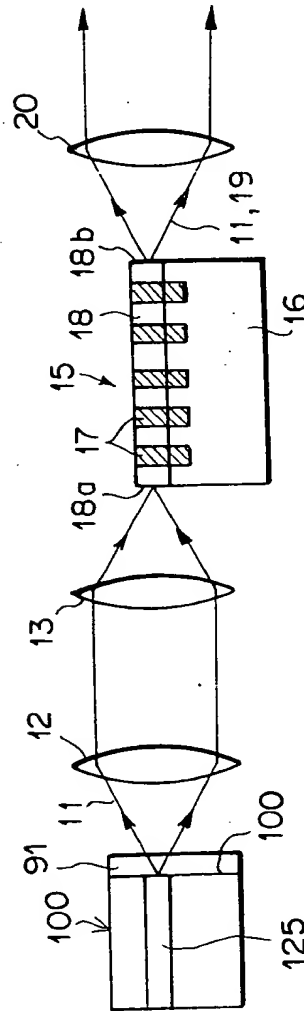
F I G . 10



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic 202-293-7060  
 11 of 38

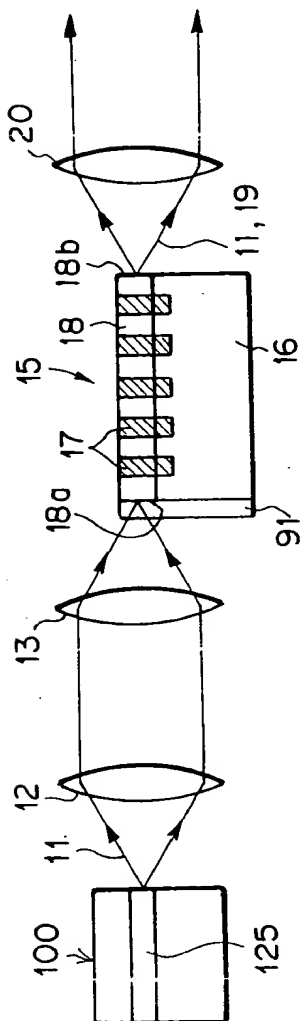
F I G . 11



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA, Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexico 202-293-7060  
 12 of 38

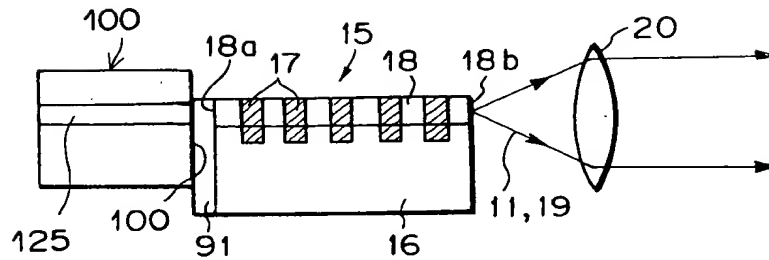
F I G . 1 2



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA.....Q64226  
 CONDUCTOR LASER MODULE HAVING OPTICAL  
 LENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 13 of 38

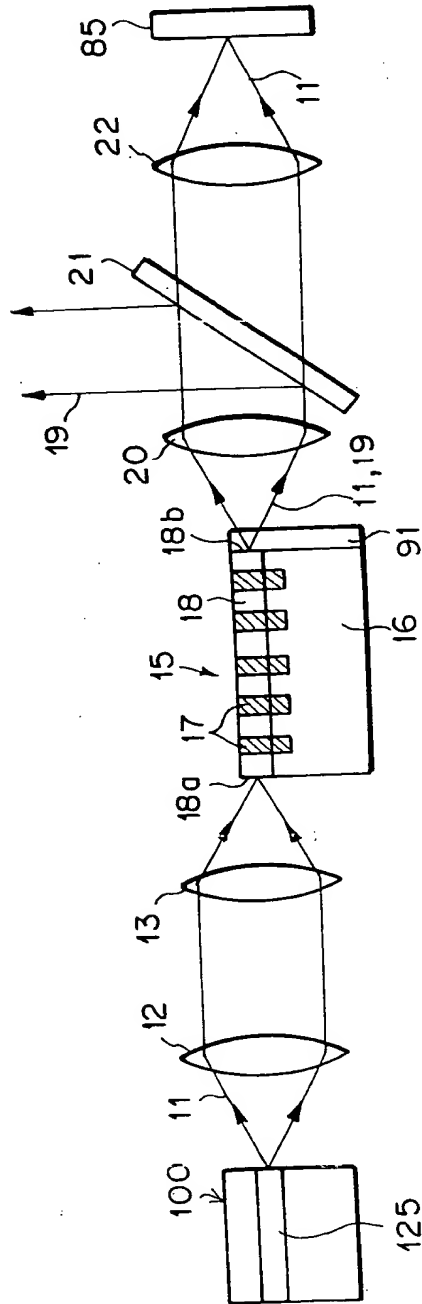
F I G . 13



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

KAWA.....Q64226  
 CONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 14 of 38

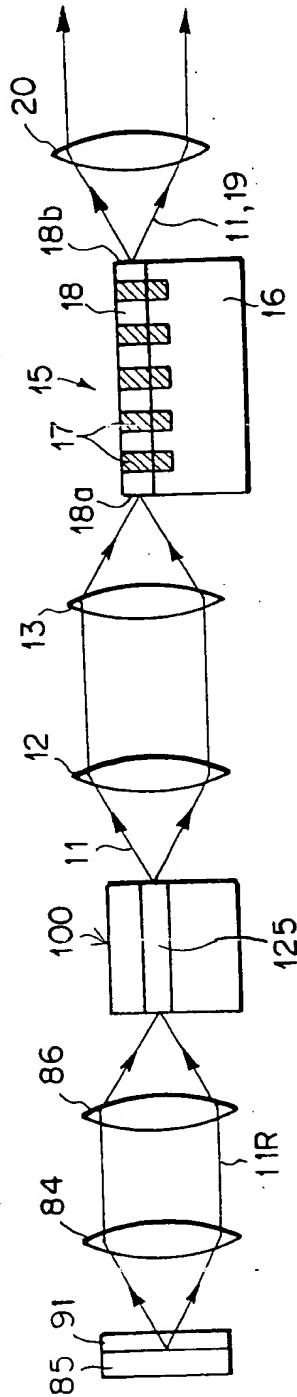
# F I G . 1 4



APPROVED	O.G. FIG.	
BY	CLASS	SURCLASS
DRAFTSMAN		

HAYAKAWA, Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic... 202-293-7060  
 15 of 38

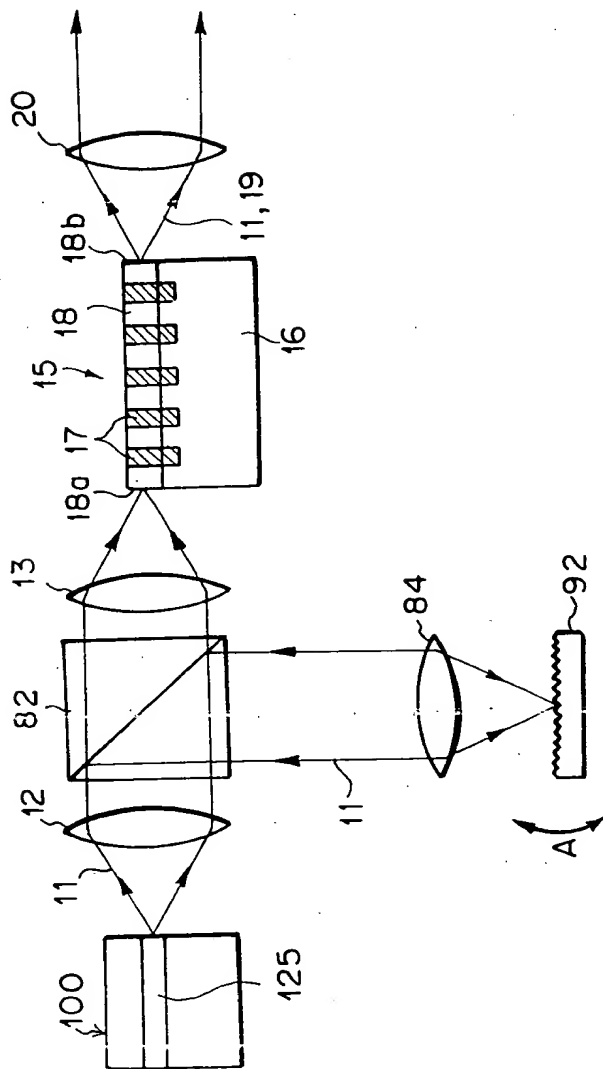
F I G. 15



APPROVED	O.G. FR.
BY	CLASS
DRAFTSMAN	SUBCLASS

YAKAWA, Q64226  
 IONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic. 202-293-7060  
 16 of 38

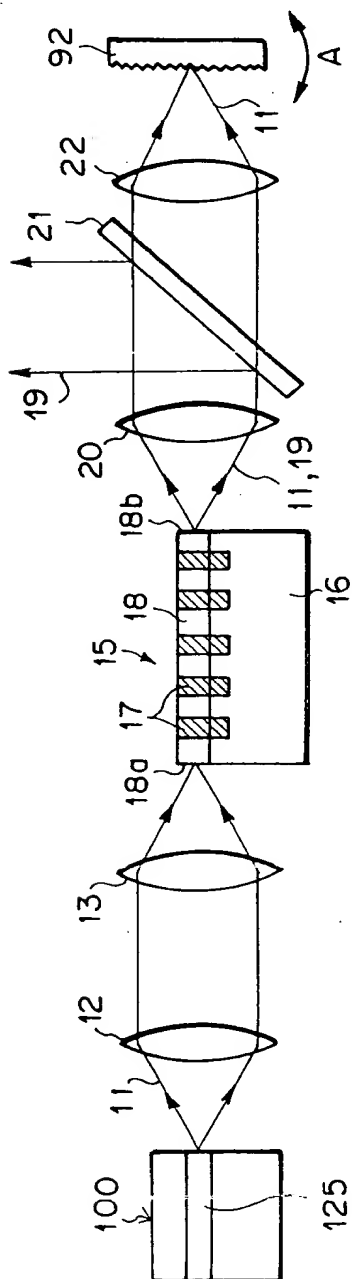
F I G. 16



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 17 of 38

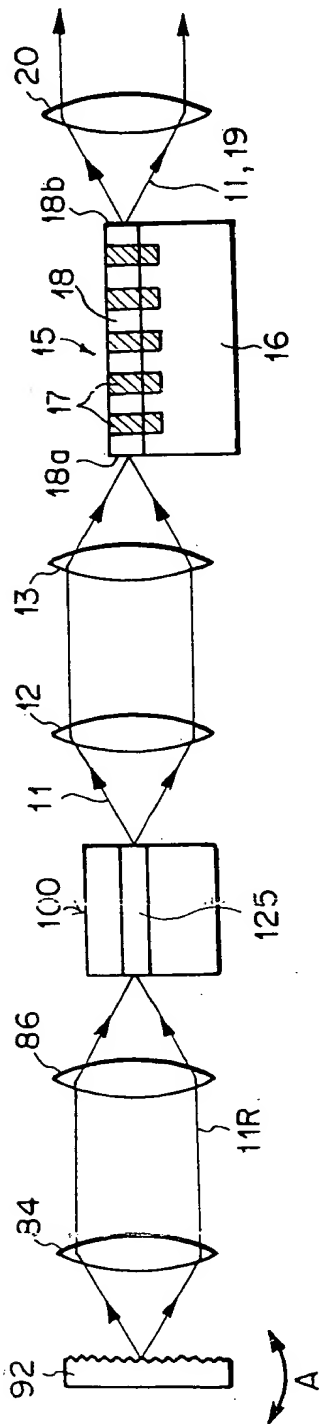
F I G . 17



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic. 202-293-7060  
 18 of 38

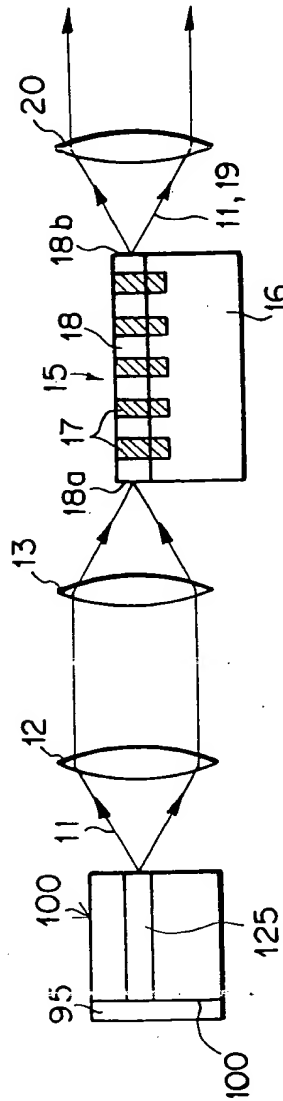
F I G . 18



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

HAYAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 19 of 38

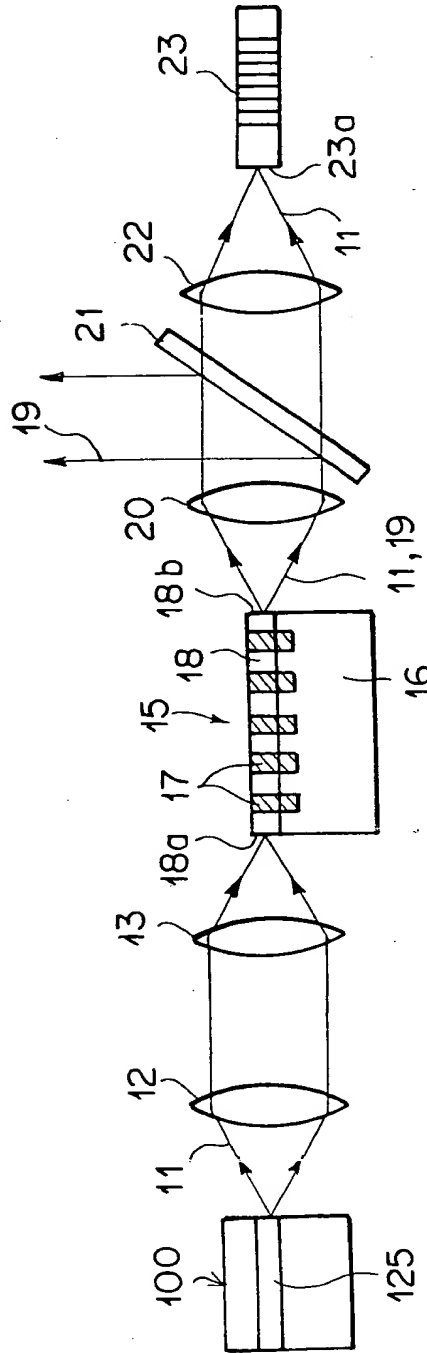
F I G . 19



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA, Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic 202-293-7060  
 20 of 38

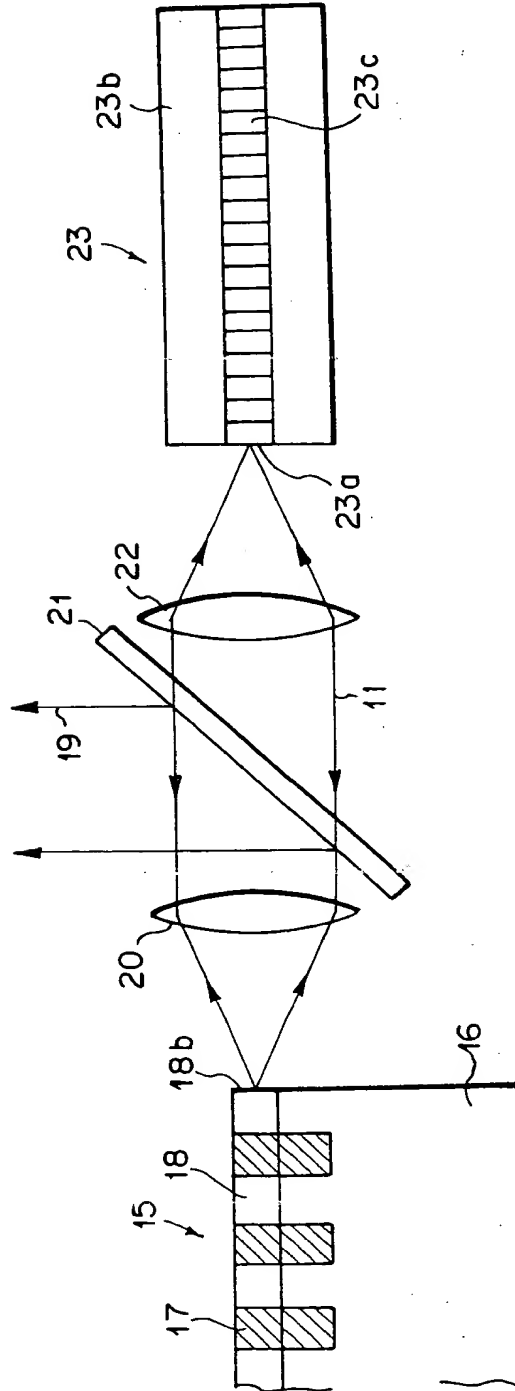
F I G . 20



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic 202-293-7060  
 21 of 38

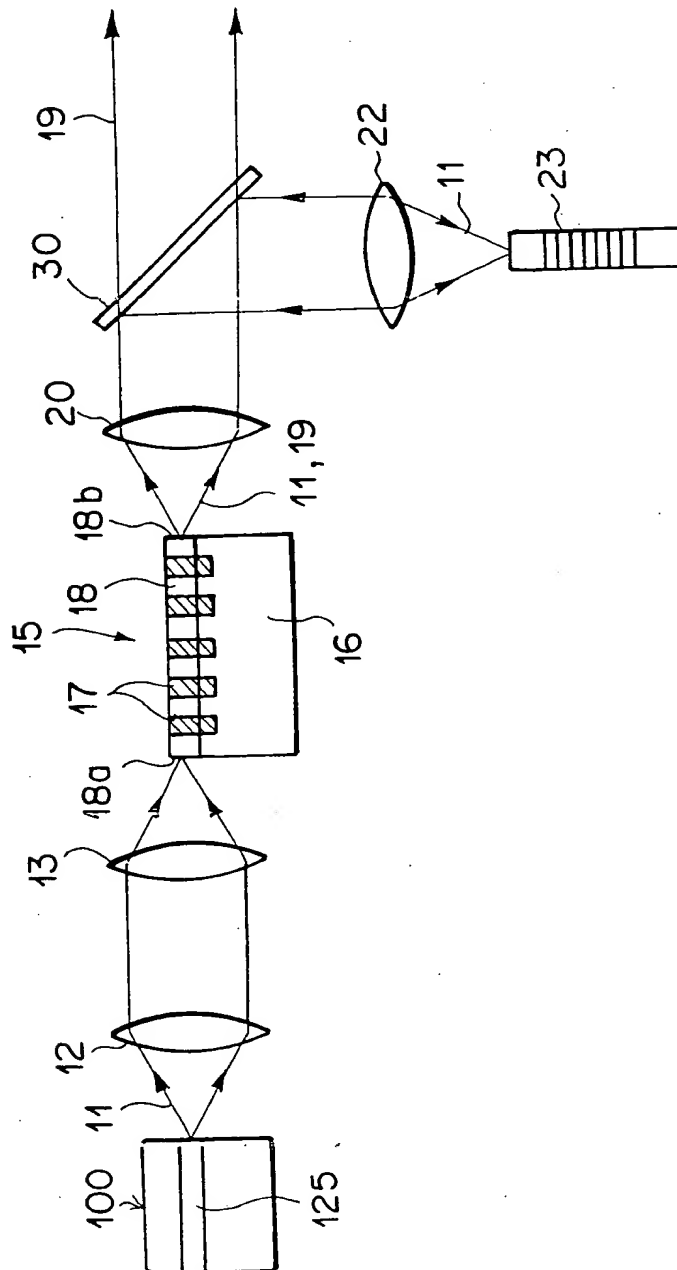
F I G . 2 1



APPROVED	BY
DRAFTSMAN	

HAYAKAWA Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic 202-293-7060  
 22 of 38

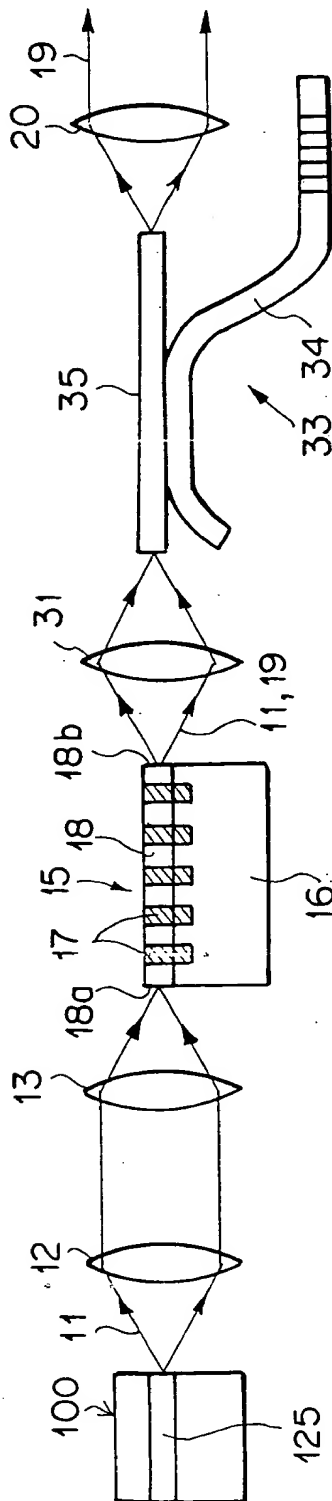
F I G . 22



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 23 of 38

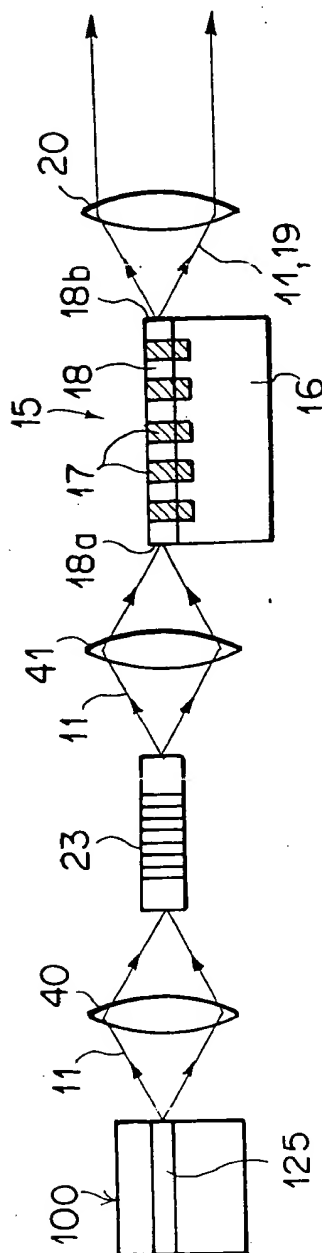
# F I G . 23



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic 202-293-7060  
 24 of 38

F I G. 24

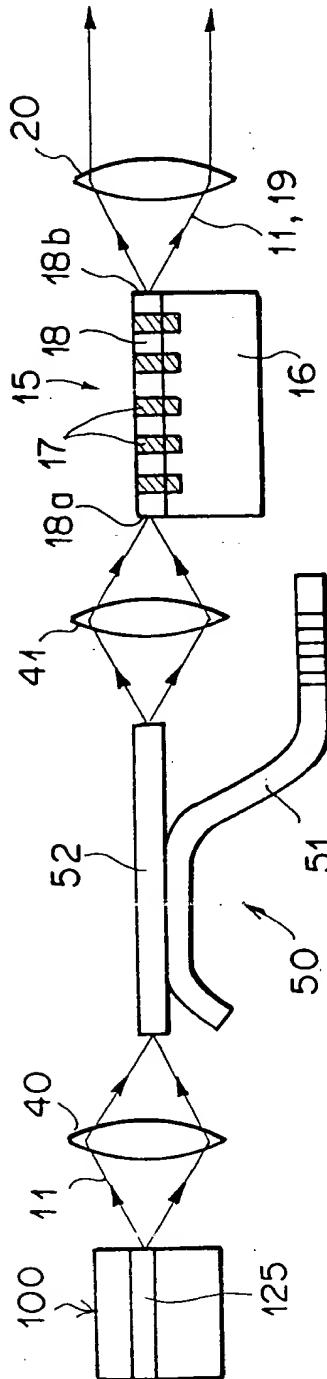




APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
CRAFTSMAN		

HAYAKAWA  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic  
 26 of 38

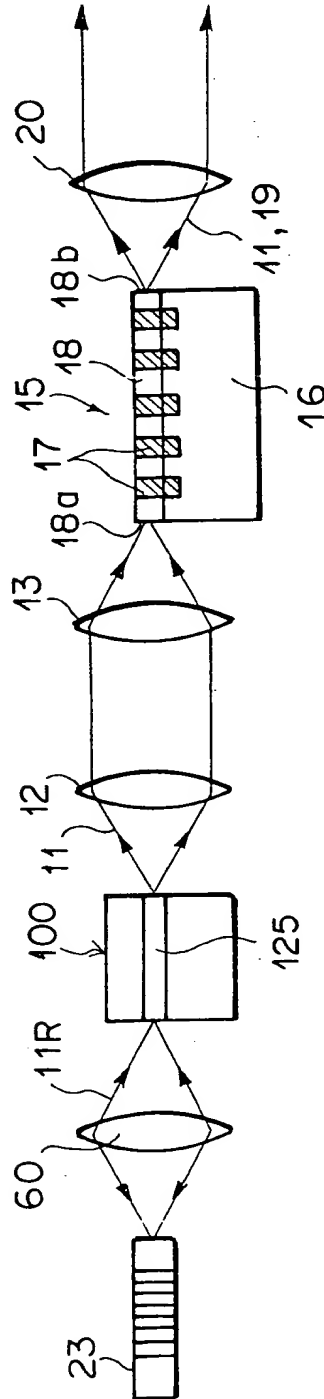
F I G . 26



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

HAYAKAWA Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic 202-293-7060  
 27 of 38

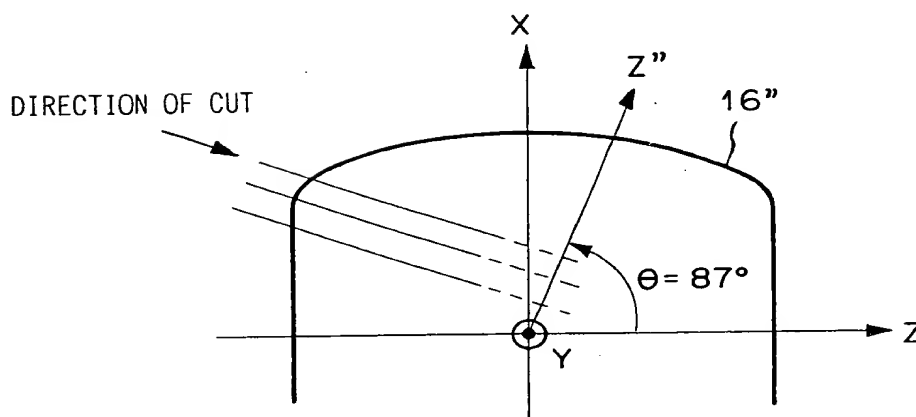
F I G . 27



APPROVED  
BY  
DRAFTSMAN

HAYAKAWA.....Q64226  
SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
Filed: April 24, 2001  
Darryl Mexic.....202-293-7060  
28 of 38

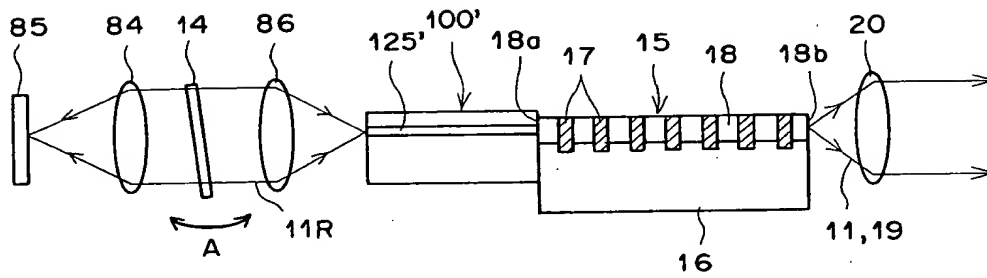
F I G . 28



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 29 of 38

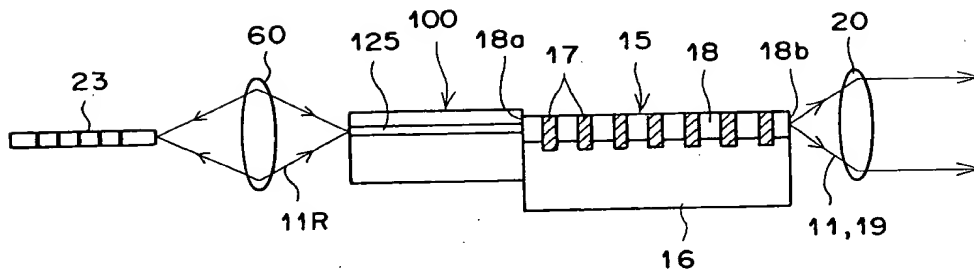
F I G . 29



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 30 of 38

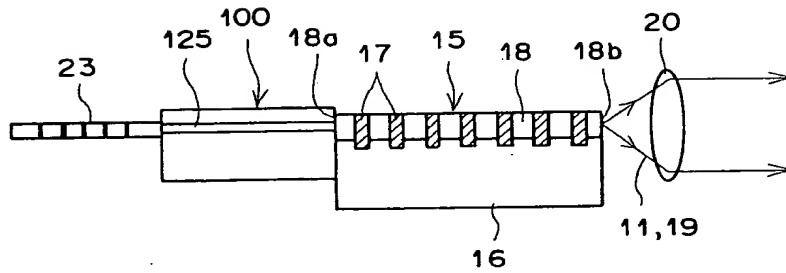
F I G . 30



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 31 of 38

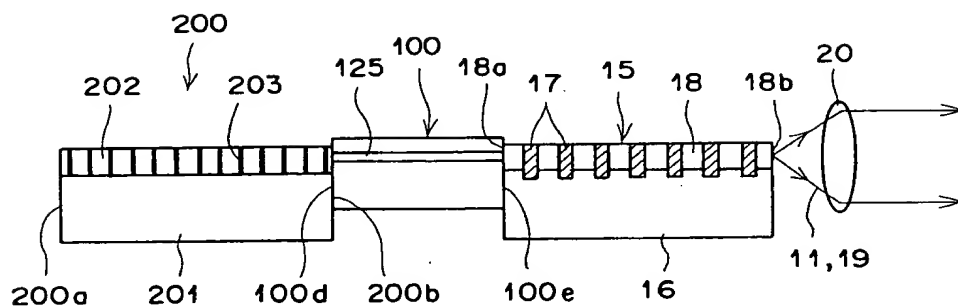
F I G . 31



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 32 of 38

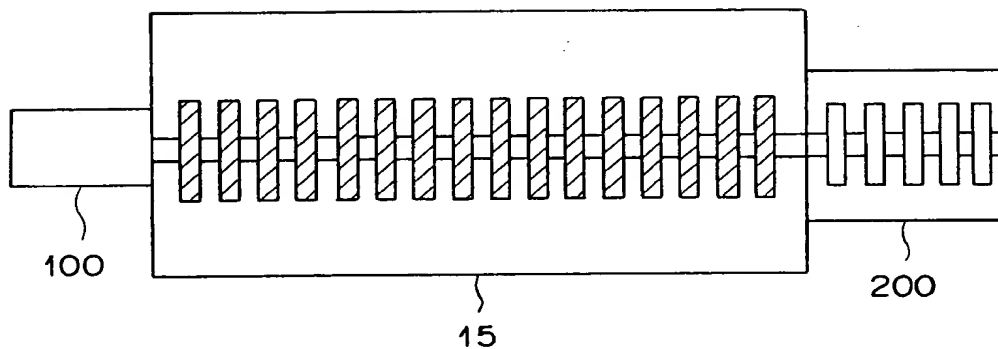
F I G . 32



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 33 of 38

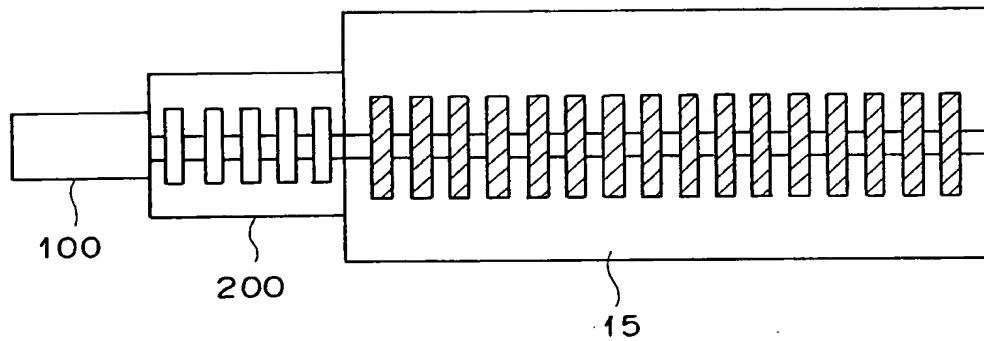
# F I G . 33



APPROVED	O.G. FILE	
BY	CLASS	SUBJECT
DRAFTSMAN		

HAYAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 34 of 38

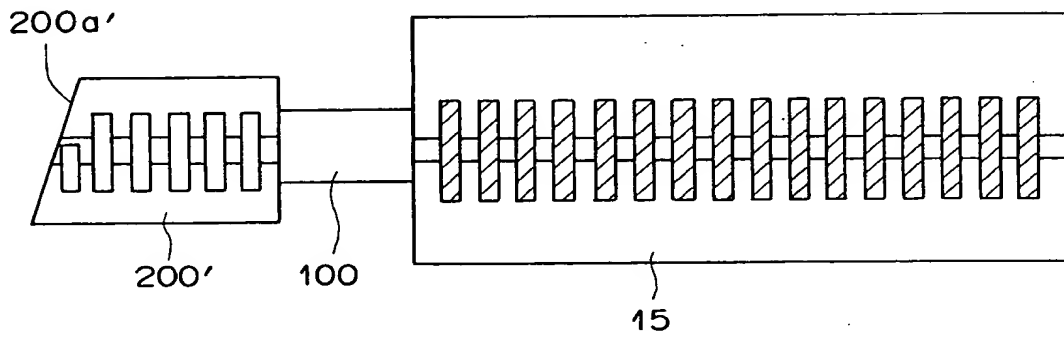
F I G . 34



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 35 of 38

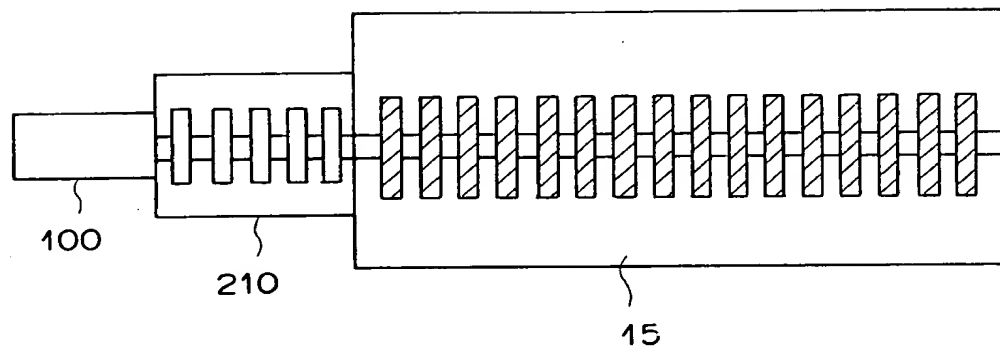
# F I G . 35



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.....202-293-7060  
 36 of 38

F I G . 36

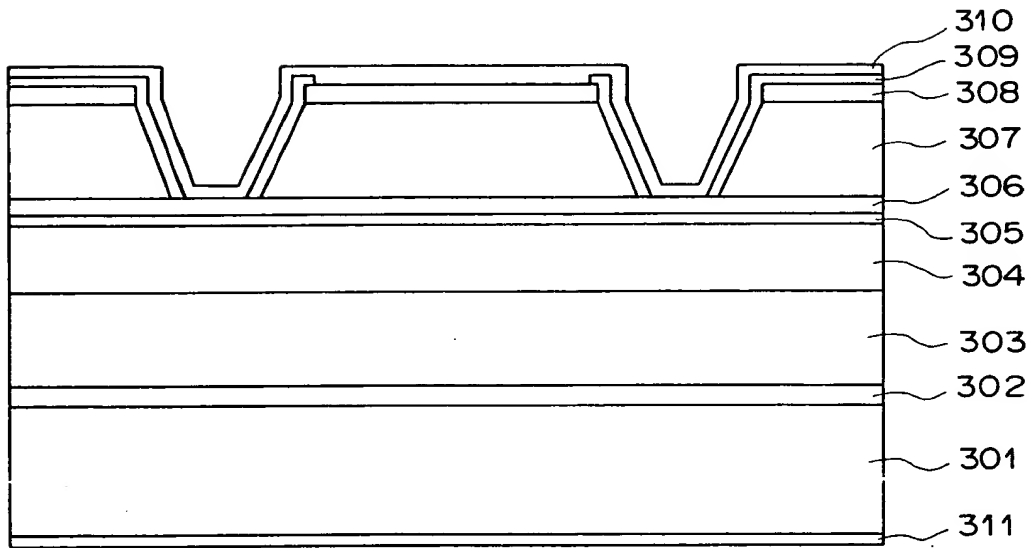


APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA.....Q64226  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mxix.....202-293-7060  
 37 of 38

F I G . 37

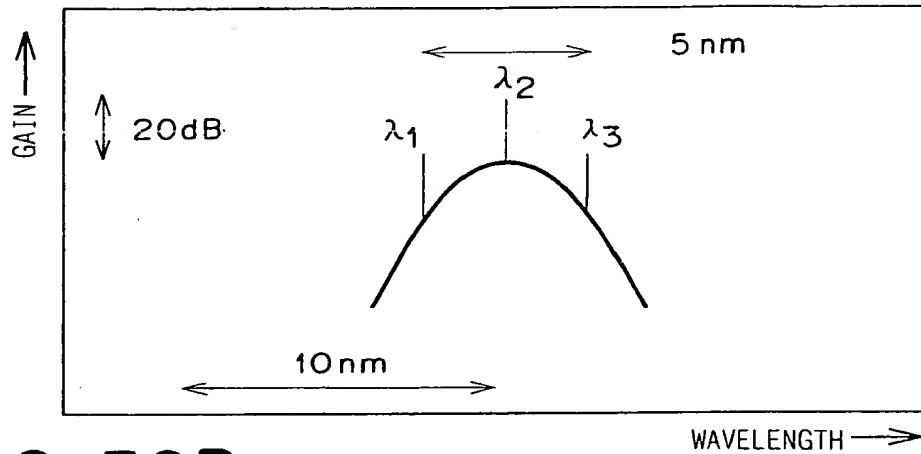
300



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

HAYAKAWA  
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL  
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR  
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAY  
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS  
 Filed: April 24, 2001  
 Darryl Mexic.  
 38 of 38

F I G. 38A



F I G. 38B

